

## ABSTRACT

A method and apparatus for achieving crypto-synchronization in a packet data communication system employing cryptographic communications. In a transmitter, a state vector is incremented at a predetermined rate and is provided to an encryption module. The encryption module uses the state vector to sequentially encrypt the data frames. During periods of frame dropping prior to encryption, the state vector is disabled, thereby allowing for sequential encryption of the data frames. In a receiver, during a frame dropping condition, the state vector is advanced in proportion to the number of frames dropped. During an underflow condition at the receiver, the state vector is disabled for the duration of the underflow condition, and enabled once the underflow condition has passed.

1. A method for achieving crypto-synchronization in a packet data communication system employing cryptographic communications, comprising: incrementing a state vector at a predetermined rate in a transmitter; providing the state vector to an encryption module; sequentially encrypting data frames using the state vector; disabling the state vector during periods of frame dropping prior to encryption; and sequentially encrypting the data frames during the periods of frame dropping.